Sources of Hazardous Substances in the PASSAIC RIVER STUDY AREA

POTENTIALLY RESPONSIBLE PARTIES

PASSAIC VALLEY SEWERAGE COMMISSIONERS

PREPARED FOR:
CHEMICAL LAND HOLDINGS, INC.
ON BEHALF OF THE
OCCIDENTAL CHEMICAL CORPORATION

INDEX OF DOCUMENTS IN SUPPORT OF COMMENTS CONCERNING PASSAIC VALLEY SEWERAGE COMMISSIONERS

TAB A: **List of Documents Obtained from the PVSC Regarding Companies for Whom the PVSC Indicated it Had No Information**

This table identifies documents CLH has located in the PVSC's files, which the PVSC denied having in its 104(e) response.

TAB B: **PVSC Log**

The PVSC maintains a log that shows the time each of the outfalls is opened and the time it is closed.

TAB C: **Summary of Measurement Year 1995**

The PVSC uses these logs to compute the amount of material bypassed, now referred to as "throw out," annually.

TAB D: **New Jersey Pollutant Discharge Elimination System General Permit No. NJ0105023 for Combined Sewer Systems**

This permit allows PVSC to operate CSOs.

TAB E: **104 (e) Request for Information**

This is a sample list of questions to submit to the PVSC to obtain the information known to be in possession of the PVSC, as well as to elicit a more thorough search by the PVSC for potentially relevant documents.

A

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List of Documents Obtained From the PVSC Regarding Companies For Whom the PVSC Stated It Has No Information

Company	PVSC Documents
Active Oil Company	♦ PVSC memos and correspondence regarding Active Oil/R.A.Y. Developers ♦ PVSC Monthly Reports from 1976 ♦ Stream Contamination Reports from 1976 ♦ PVSC Department of Sanitation Control Laboratory Reports
Alcan Aluminum	♦ 1975 Letter from Alcan to PVSC regarding plant closing ♦ Seymour Lubetkin's Passaic River Discharge Outlets Notebook
Alden Leeds	♦ PVSC Annual Report, 1971
Astron Corporation	♦ Weekly Summary of Inspections, May 21-25, 1956
Aszo Steel Company	♦ PVSC Annual Report, 1971 (listed under Crucible) ♦ PVSC Monthly Report, July 1971 (listed under Crucible)
Dovan Chemical	♦ Correspondence between the PVSC and Dovan from 1924 and 1925
Dupont	♦ Correspondence between the PVSC and the City of Newark ♦ Pitt Consol Waste Effluent Survey, 1972 ♦ PVSC Annual Reports, 1972, 1973, 1974 ♦ PVSC Correspondence regarding Roanoke Avenue sewer from 1958 ♦ PVSC Report "Pollution Corrected During 1969" ♦ Pitt Consol Sewer Connection Applications, 1980, 1986 ♦ PVSC Industrial Sampling Study Results, 1982 ♦ Correspondence between the PVSC and Dupont from 1986
Gabest Company	♦ PVSC Annual Report, 1971 (listed under Crucible) ♦ PVSC Monthly Report, July 1971 (listed under Crucible)
General Lead Batteries	♦ Correspondence between the PVSC and General Lead Batteries from 1926 ♦ Report on General Lead Batteries, March 4, 1926
A. Gross & Company	♦ Waste Effluent Survey, 1975
C.F. Guyon	♦ PVSC Annual Report, 1971 (listed under Crucible) ♦ PVSC Monthly Report, July 1971 (listed under Crucible) ♦ Seymour Lubetkin's Passaic River Discharge Outlets notebook
Meile Brothers Trucking	♦ PVSC Annual Report, 1971 (listed under Crucible) ♦ PVSC Monthly Report, July 1971 (listed under Crucible)

Company	PVSC Documents
PPG	♦ Excerpts from Combined Sewer Overflow Report ♦ Seymour Lubetkin's Passaic River Discharge Outlets Notebook
Plextone Corporation	♦ PVSC Annual Report, 1972
Prince Packaging	♦ PVSC Annual Report, 1971 (listed under Crucible) ♦ PVSC Monthly Report, July 1971 (listed under Crucible)
Reilly Tar	♦ PVSC Stream Contamination Reports, 1948
Reliable Steel Drum	♦ PVSC Stream Contamination Report, October 1948 ♦ PVSC Stream Contamination Report, January 1949
Revere Smelting and Refining	♦ Stream Pollution Report, January 15, 1970 ♦ Stream Pollution Report, January 26-30, 1970 ♦ Stream Pollution Report, February 9-13, 1970 ♦ PVSC Department of Sanitation Control Laboratory Report, February 13, 1970
Rose Ribbon and Carbon Manufacturing	♦ PVSC Annual Report, 1971 (listed under Crucible) ♦ PVSC Monthly Report, July 1971 (listed under Crucible)
Joseph Supor & Sons Trucking	♦ PVSC Annual Report, 1971 (listed under Crucible) ♦ PVSC Monthly Report, July 1971 (listed under Crucible)
Synfax Manufacturing	♦ Stream Contamination Report, December 27, 1976
Thomasett Color	♦ Weekly Summary of Inspections, Week of August 6-10, 1956 ♦ Weekly Summary of Inspections, Week of July 30- August 3, 1956 ♦ Correspondence between Hilton Davis and PVSC from 1984 and 1987 ♦ Excerpt from Heavy Metals Source Determination Study
Tower Manufacturing	♦ Correspondence between the PVSC and Tower Manufacturing from 1925
Woburn Degreasing	♦ PVSC Correspondence from 1936 ♦ Stream Pollution Report, March 2-6, 1964 ♦ Stream Pollution Report, June 15-19, 1964 ♦ Stream Pollution Report, August 17-21, 1964
Universal International Industries	♦ PVSC Annual Report, 1972 ♦ Stream Contamination Report, June 15, 1972 ♦ Stream Contamination Report, June 19-23, 1972 ♦ PVSC Correspondence dated June 28, 1972

B

849170011

TO: F. ILLIS

FROM: RDV

DATE: 11/11/95

PHIL IABRUKOWICH
ART DWAN
~~ALLEN INSABELLA~~ F. ILLIS
LOUIS LAMBE
SHIFT SUPERVISORS
JOHN SIMMS
ANDY CALTAGIRONE

SOUTH SIDE INTERCEPTOR

TIME			S-11	TIME			S-11
15:40	11-11-95	S/S CLOSED 12 MIN.	RDV				
17:25	11/11	S/S OPEN 12	RDV				
19:50	11/NOV.	CLOSED 12-MIN.	L.V.				
17 30	11/12	OPEN 6 MIN	RDV				
19:30	12/NOV.	OPEN 6-MIN.	L.V				
		TOTAL. 12-MIN.					

TRUNK LINE RELIEF

TIME DATE	OUT TIME	OUTLETS	OUT OF SYSTEM	AUTO MODE 8300 BOARD	LINE CREW MANUAL	TIME DATE	IN TIME	AUTO MODE 8300	LINE CREW MANUAL
11-11-95	15 35	CLAY ST.	✓	✓		12/NOV.	21:45	✓	
		VERONA	✓	✓			20:45	✓	
		HERBERT	✓	✓			20:45	✓	
		4TH AVE.	✓	✓			20:45	✓	
		CITY DOCK	✓	✓			20:10	✓	
		JACKSON	✓	✓			20:45	✓	
11-11-95	15 35	POLK	✓	✓			20:45	✓	
12/NOV.	01:37	FREEMAN		O.O.S.	✓		O.O.S.	O.O.S.	
11-11-95	15 35	SAYBROOK	✓	✓			20:10	✓	
11-11-95	15 35	RECTOR ST.	✓	✓			20:10	✓	
		UNION							
		YANTACAW							
		LODI							
11-11-95	15 35	MARKET ST.	✓	✓		11/NOV.	17 35	✓	

REMARKS: MARKET OUT OF SYSTEM AT 22:00 - FROM 8300 BOARD
SUN/ 08:30 - MARKET BACK IN THE SYSTEM.

849170012

C

Summary Of Measurement Year 1995

WEEK END DATE->	FIRST Quarter	SECOND Quarter	THIRD Quarter	FOURTH Quarter	M.G.	Average	1994 Average	Percent Difference
MUNICIPALITY/DAYS	91.50	90.00	91.00	92.50	365.00	M.G.D.	M.G.D.	
PATERSON	2556.42	2493.37	2573.24	2470.65	10093.68	27.654	30.371	-8.95%
HALEDON	97.33	104.65	100.03	100.78	402.79	1.104	1.284	-14.06%
NORTH HALEDON	44.95	46.09	43.76	46.75	181.55	0.497	0.613	-18.86%
PROSPECT PARK	33.03	33.76	33.24	29.91	129.93	0.356	0.347	2.59%
HAWTHORNE	160.87	172.77	180.70	191.44	705.77	1.934	2.312	-16.37%
TOTOWA	173.32	189.66	171.46	181.54	715.97	1.962	2.204	-11.00%
WEST PATERSON	101.05	113.03	97.04	93.84	404.95	1.109	1.345	-17.51%
GLEN ROCK	91.87	93.67	89.33	89.58	364.46	0.999	1.147	-12.95%
FAIRLAWN	297.52	336.93	319.91	313.37	1267.73	3.473	3.367	3.15%
FAIRLAWN INDUSTRY	11.92	18.04	16.18	14.48	60.63	0.166	0.198	-16.11%
ELMWOOD PARK	189.39	195.91	180.93	174.93	741.15	2.031	2.360	-13.96%
MARCAL PAPER	380.00	362.51	358.73	387.63	1488.88	4.079	4.124	-1.09%
HOFFMANN L.R.	169.31	151.52	179.29	221.92	722.05	1.978	2.488	-20.49%
CLIFTON	1060.17	1101.02	1023.89	987.66	4172.74	11.432	13.694	-16.52%
PASSAIC	1189.98	1194.44	1112.28	1206.03	4702.73	12.884	14.483	-11.04%
GARDEN STATE PAP.	656.03	706.26	665.21	758.97	2786.47	7.634	6.715	13.69%
GARFIELD	316.66	316.86	297.34	344.90	1275.75	3.495	4.376	-20.13%
SADDLE BROOK	129.69	142.82	137.08	135.63	545.22	1.494	1.600	-6.64%
LODI	285.82	283.07	252.64	268.07	1089.60	2.985	3.219	-7.26%
WALLINGTON	140.24	150.84	145.34	143.02	579.43	1.587	1.651	-3.85%
EAST RUTHERFORD	61.91	63.72	68.24	69.77	263.64	0.722	0.809	-10.72%
RUTHERFORD	79.69	87.92	93.03	83.52	344.16	0.943	1.091	-13.58%
LYNDHURST	244.96	290.15	295.52	271.58	1102.20	3.020	3.140	-3.83%
NUTLEY	377.12	431.38	403.65	345.16	1557.30	4.267	4.788	-10.89%
BELLEVILLE	317.71	299.34	281.58	292.54	1191.17	3.263	4.031	-19.04%
UNION OUTLET	1877.93	1922.90	1750.59	1623.58	7174.99	19.658	24.355	-19.29%
LITTLE FALLS	116.57	147.45	111.52	98.49	474.02	1.299	1.660	-21.77%
NORTH ARLINGTON	148.15	159.37	144.88	148.15	600.54	1.645	2.005	-17.94%
KEARNY	558.95	569.59	495.49	494.55	2118.58	5.804	6.905	-15.94%
EAST NEWARK	45.42	46.99	47.71	50.44	190.56	0.522	0.536	-2.60%
HARRISON	316.90	244.32	249.27	302.59	1113.08	3.050	4.157	-26.64%
JERSEY CITY	4048.97	4083.91	4014.93	4184.83	16332.63	44.747	46.639	-4.06%
BAYONNE	751.57	819.34	731.33	712.10	3014.35	8.258	9.267	-10.88%
SOUTH KEARNY	149.88	156.76	149.87	156.15	612.661	1.679	1.882	-10.81%
NEWARK	6644.15	6897.55	6498.01	6703.56	26743.27	73.269	83.782	-12.55%
THROWOUT	130.29	68.87	69.95	191.69	460.80	1.262		
PLANT TOTAL	23825.44	24427.89	23313.24	23698.08	95264.643	260.999	292.95	-10.91%
PLANT TOTAL	23825.44	24427.89	23313.24	23698.08	95264.643	260.999	292.95	-10.91%
RAIN FALL	8.52	7.95	7.15	9.98	33.60			

D

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION

NEW JERSEY POLLUTANT DISCHARGE ELIMINATION SYSTEM
GENERAL PERMIT NO NJ0105023
FOR
COMBINED SEWER SYSTEMS

Permittee	Co-Permittee
GENERAL PERMIT- CATEGORY CSS PER INDIVIDUAL NOTICE OF AUTHORIZATION	

Property Owner	Location of Activity
GENERAL PERMIT- CATEGORY CSS PER INDIVIDUAL NOTICE OF AUTHORIZATION	GENERAL PERMIT- CATEGORY CSS PER INDIVIDUAL NOTICE OF AUTHORIZATION

Issuance Date	Effective Date	Expiration Date
January 27, 1995	March 1, 1995	February 28, 2000

By Authority of:

Robert C. Shinn Jr., Commissioner

PART I. *AUTHORIZATION UNDER THIS PERMIT*

A. *Permit Area*

This permit applies to all areas of the State of New Jersey.

B. *Eligibility & Scope*

This permit may authorize all existing combined sewer systems and combined sewer overflow points specifically identified or described in the individual authorizations.

C. *Definitions*

1. As used in this permit, the following words and terms shall have the following meanings:

"*Combined Sewer Collection and Conveyance System*" means any portion of a Combined Sewer System excluding the Combined Sewer Overflow Control Facilities.

"*Combined Sewer Overflow" (CSO)* means the excess flow from the combined sewer system which is not conveyed to the Domestic Treatment Works for treatment, but transmitted by pipe or other channel directly to waters of the State .

"*Combined Sewer Overflow Control Facilities*" means any portion of the combined sewer system beginning from and including the point at which flows are diverted within the collection and conveyance system from proceeding to the treatment facility and ending at the CSO Point where the CSO is directed to the receiving waters. These portions of the combined sewer system include, but are not limited to, the regulator, the outfall structure, tide gate, and other appurtenances.

"*Combined Sewer Overflow Point" (CSO Point)* means a discrete point in a combined sewer system which provides for the release of combined sewer overflows (See N.J.A.C. 7:22A-1.4).

"*Combined Sewer System*" means a sewer system that is designed to carry sanitary sewage at all times and that also is designed to collect and transport storm water from streets and other sources, thus serving a combined purpose (See N.J.A.C. 7:14A-1.9).

"*Domestic Treatment Works*" *(DTW)* means all publicly owned treatment works as well as any privately owned treatment works processing primarily domestic wastewater and pollutants together with any ground water, surface water, stormwater or process wastewater that may be present (See N.J.A.C. 7:14A-1.9).

"*Domestic Wastewater*" means the liquid waste or liquid borne wastes discharged into a domestic treatment works(See N.J.A.C. 7:14A-1.9).

"*Dry Weather Overflow*" *(DWO)* means a type of combined sewer overflow which is not the direct result of an increase in wastewater flows due to events of precipitation including floods, storm events, and prolonged snow melts. Dry weather overflows are events of noncompliance which may be caused by operator error, improperly designed facilities, illegal discharges or connections to the facilities, the lack of preventative maintenance, careless or improper operation or due to unforeseen conditions caused by clogged regulators, mechanical and structural failures, excessive infiltration, etc.

"*Facility*" means any component or appurtenance of any sanitary or stormwater sewer system (See N.J.A.C. 7:22A-1.4).

"*Sanitary Sewer System*" means a network of pipes, conduit or other physical facilities used to carry wastewater to a wastewater treatment facility. A sanitary sewer system shall not include a system which carries only stormwater (See N.J.A.C. 7:22A-1.4).

"*Stormwater*" means stormwater runoff, snow melt runoff, and surface runoff and drainage (See N.J.A.C. 7:14A-1.9).

"*Stormwater Sewer System*" means the designed features within a municipality which collect, convey, channel, hold, inhibit or divert the movement of stormwater (See N.J.A.C. 7:22A-1.4).

"*Solids/Floatables*" means any wastes or debris floating, suspended or otherwise contained in wastewater or waters of the State (See N.J.A.C. 7:22A-1.4).

"*Treatment Works*" means any device or system whether public or private, used in the storage, treatment, recycling, or reclamation of municipal or industrial waste of a liquid nature including intercepting sewers, outfall sewers, sewage collection systems, cooling towers and ponds, pumping, power and other equipment and their appurtenances; extensions, improvements, remodeling, additions, and alterations thereof; elements essential to provide a reliable recycled supply such as standby treatment units and clear well facilities; and any other works including sites for the treatment process or for the ultimate disposal of residues resulting from such treatment. Additionally, "treatment works" means any other method or system for preventing, abating, reducing, storing, treating, separating, or disposing of pollutants , including storm water runoff, or industrial waste in combined or separate storm water and sanitary sewers (See N.J.A.C. 7:14A-1.9).

"*Wastewater*" means residential, commercial, industrial, or agricultural liquid waste, septage, stormwater runoff or any combination thereof or other residue discharged or collected into a sanitary or stormwater sewer system, or any combination thereof (See N.J.A.C. 7:22A-1.4).

D. *Requiring an Individual Permit or Another General Permit*

1. The Department may require any permittee authorized under this permit to apply for and obtain an individual Discharge to Surface Water (DSW) permit, or seek and obtain authorization under another general permit. Conversely, any permittee authorized under this permit may request to be excluded from authorization under this permit by applying for an individual DSW permit. However, an individual permit may include more stringent requirements based on site specific conditions. Termination of existing permits under such circumstances is governed by N.J.A.C. 7:14A-3.9.

2. If, after receiving authorization under this permit, a permittee is required by the Department to obtain another NJPDES DSW permit that would also cover the authorized facility, then authorization under this permit shall remain in effect only until either:

a. The date such other permit becomes effective; or

b. The date the application for such other permit (or request for authorization under another general permit) is denied, or as otherwise specified by the Department.

If such a permittee fails to submit a complete application or request for authorization by the date specified by the Department, then the general permit authorization remains in effect only until that date, unless otherwise specified by the Department.

E. *Authorization*

1. In order to obtain authorization under this permit, a complete Request for Authorization (RFA) shall be submitted in accordance with the requirements of Part II of

this permit. Upon review of the RFA, the Department may, in accordance with N.J.A.C. 7:14A-3.9, do one of the following:

a. Issue notification of authorization under this permit, in which case authorization is deemed effective as of the date the complete RFA is received by the Department;

b. Deny authorization under this permit and require submittal of an application for an individual DSW permit; or

c. Deny authorization under this permit and require submittal of an RFA for another general permit.

2. For combined sewer overflows authorized by this permit, the permittee is exempt from the provision in N.J.A.C. 7:14A-2.5(a)1 which states that the discharge of any pollutant not specifically regulated in the NJPDES permit or listed in the NJPDES application shall constitute a violation of the permit.

PART II. REQUEST FOR AUTHORIZATION REQUIREMENTS

A. *Deadlines for Requesting Authorization*

1. A Request for Authorization (RFA) for a facility **must be submitted prior to April 1, 1995**.

2. The Department may, at its discretion, accept an RFA submitted after the foregoing deadline, however, the permittee may still be held liable for any violations that occurred prior to the effective date of the authorization.

B. *Persons Requesting Authorization*

An RFA may be submitted by any person who currently owns and/or operates any part of a combined sewer system. An RFA may be jointly submitted by all persons who currently own and/or operate any part of a combined sewer system.

C. *Contents of the Request for Authorization*

A completed RFA shall include all of the following information regarding the regulated facility, using the Department's RFA form (additional sheets may be attached as required):

1. The name of the facilities owned and/or operated by the applicant which require the applicant to obtain this General Permit;

2. The name, mailing address, location of the facility for which the application is submitted;

3. The EPA identification number of the facility (if assigned);

4. The four (4) digit Standard Industrial Classification (SIC) code and corresponding short title assigned to the facility by the New Jersey Department of Labor. Use 4592 - "Sewerage Systems" for any portion of a combined sewer system. If the facility is exempt from Department of Labor SIC code assignment procedures, then use the four (4) digit SIC code and short title that best represents the applicant's facility/activity;

5. The legal name, address, and business telephone number of all current owners and operators, and, if applicable, their authorized agents and engineers. The RFA shall also identify whether each person named is an owner and/or operator, and whether the owner is a Federal, State, or other public agency, or is a private entity;

6. The name of the domestic treatment works to which wastewater is conveyed and treated;

7. The name of the Water Quality Management Planning Agency (See N.J.A.C. 7:15-1.5), the governmental unit, or other person that has "wastewater management plan responsibility", as defined in N.J.A.C. 7:15-5.3(b);

8. A listing of all permits or construction approvals received or applied for by the applicant at the site under any of the following programs (See N.J.A.C. 7:14A-2.1(h)6):

a. Hazardous Waste Management program under RCRA;
b. NJPDES permits or treatment works approvals under the State of New Jersey's Water Pollution Control Act or construct and operate permits;
c. Prevention of Significant Deterioration (PSD) Program under the Clean Air Act;
d. Non-attainment program under the Clean Air Act;
e. National Emission Standards for Hazardous Pollutants(NESHAPS) pre-construction approval under the Clean Air Act;
f. Ocean dumping permits under the Marine Protection Research and Sanctuaries Act;
g. Dredge or fill permits under Section 404 of the Federal Act; and
h. Other relevant environmental permits, including Federal permits.

9. Identification of administrative orders, administrative consent orders, notices of violations, complaints filed, or other corrective or enforcement action(s) required by any governmental agencies with regard to the operation of the applicant at that site concerning pollution with the previous five years;

10. For each combined sewer overflow point (CSO Point) provide the following:

a. A schematic diagram showing the configuration of the combined sewer overflow control facilities associated with each CSO Point to the combined sewer system and the combined sewer collection and conveyance system. This diagram should show the relationships of the CSO Point to portion of the combined sewer system where the

wastewater is collected, the portion of the combined sewer overflow control facility where the wastewater is diverted from the combined sewer overflow collection and conveyance facilities (i.e., the location of the regulator or other diversion structure), and the CSO Point at which the wastewater is discharged into the receiving water body (i.e., the end of the outfall structure).

b. Using FORM A: SCHEDULE OF COMBINED SEWER OVERFLOW POINTS, provide the following information :

i. The discharge serial number (a three-digit number beginning with 001 for the CSO Point, consecutively assigned to each CSO Point);

ii. The CSO Point name;

iii. The latitude and longitude of CSO Point (end of pipe), accurate to the nearest second;

iv. The name of the receiving waterbody; and

v. A description of any treatment received by the CSO prior to discharge;

11. The Federal tax identification number of the owner;

12. A copy of the U.S. Geological Survey Topographic Map, 7.5 minute quadrangle series (SCALE 1:24,000), showing the location of the facility(ies) and the name of the quadrangle(s). The applicant shall indicate on the map the facilities and/or activities, that authorization under this general permit is being requested, as follows: the delineation of the service area of the collection systems; the alignment of conveyance systems (interceptors, force mains, trunk sewers, etc.); and/or the location and/or alignment of combined sewer overflow control facilities (regulators) and the corresponding combined sewer overflow points (i.e., ends of outfalls and/or other discharge structures);

13. A brief narrative description of the facility(ies), collection system, combined sewer overflow point, or combined sewer overflow control facility, as applicable;

14. The RFA certification contained in Attachment A;

15. A photocopy of the publication of the public notice required under II.E, below (the name and date of the publication and the section and page the public notice was printed in shall be indicated); and

16. Any additional information that may be required by the Department to be included as part of the RFA if the Department determines that such additional information (including, but not limited to data, reports, specifications, plans, permits, or other information) is reasonably necessary to determine whether to authorize the discharge under this permit.

D. ***Where to submit***

A completed and signed RFA shall be submitted to the Department at the address specified on the Department's RFA form.

E. ***Additional Notification***

The permittee shall publish a notice in a daily or weekly newspaper within the area affected by the permitted facility stating that a request for authorization under General Permit No. NJ0105023 for Combined Sewer Systems has been submitted in accordance with N.J.A.C. 7:14A-3.9(b)2. This notice shall also identify the legal name and address of the owner and operator, the facility name and address, and type of facility and discharges. A certification stating that arrangements for such notification have been made is contained in Attachment A and shall be signed and submitted as part of the RFA.

F. ***Reauthorization***

As stated on the cover page, this permit expires in five years from the effective date of the permit. If a CSO authorized by this permit will continue after the expiration of this permit, the permittee is required to submit a new RFA within 180 days before the expiration date of this permit.

PART III. DISCHARGE LIMITATIONS

A. ***(Reserved)***

B. ***Dry Weather Overflows***

1. Applicability: This section is applicable to all permittees of Combined Sewer Overflow Points and Combined Sewer Overflow Control Facilities.

2. Dry weather overflows are prohibited.

3. Reporting Requirements

a. The permittee shall report all dry weather overflows (DWO) as defined in Part I, C of this permit.

b. The permittee shall, within 24 hours after the commencement of the DWO or of the permittee becoming aware of the DWO, verbally communicate the following information to the Department via the DEP Hotline at (609) 292-7172:

i. A description of the discharge, including the time of the discharge, the location of the discharge, the designated name and the three-digit discharge serial number (See Part II.C.10 of this permit), the estimated volumetric flow rate of the discharge, a description of the nature of the discharge as (1) "a dry weather overflow of wastewater from a combined sewer system" or, as (2) "a dry weather overflow of wastewater from a combined sewer system which is (or "maybe") contaminated with (insert the identity of the

suspected contaminant/pollutant, or describe the source of the additional and unusual contamination/pollutant), and the name of the receiving waterbody;

ii. The duration of the discharge, including the dates and times, and, if the reason for the discharge has not been corrected, the anticipated time when the permittee will return the discharge into compliance;

iii. The cause of the discharge;

iv. Steps the permittee will take to determine the cause of the discharge;

v. Steps the permittee is taking to reduce and eliminate the non complying discharge; and

vi. Steps the permittee is taking to reduce, eliminate, and prevent reoccurrence of the discharge.

c. The permittee shall, within five (5) business days, Saturdays, Sundays, and state and federal holidays excepted, after the commencement of a DWO or of the permittee becoming aware of a DWO, submit written documentation, to the person identified in f, below, including properly signed, contemporaneous operating logs, or other relevant evidence, on the circumstances of the discharge event, and including all of the information listed below. The Department must receive the information listed under items i through vi below within the five (5) day period in order for the permittee to meet this requirement. If the permittee becomes aware that it has failed to submit any relevant facts or has submitted incorrect information required in b, above, the permittee shall immediately submit such facts or information to the Department. The written information to be submitted includes the following:

i. All of the information required by b, above;

ii. All properly signed, contemporaneous operating logs, or other relevant evidence, on the circumstances of the discharge;

iii. Reasons that the DWO occurred, including the cause of the DWO;

iv. Evidence that the permittee was properly operating the facility at the time of the discharge;

v. Evidence that the permittee submitted notice of the DWO as required pursuant to c, above, or in the case of a DWO resulting from the performance by the permittee of maintenance operations, evidence the permittee provided prior notice and received prior written approval therefor from the Department, including the name, title, address, and telephone number of the individual who satisfied this requirement, the date and specific time the individual notified the Department, and the name and title of the individual within the Department to which the permittee gave such notice; and

vi. Evidence that the permittee complied with all remedial measures the Department required.

d. For any DWO or other CSO which causes injury to persons, or damage to the environment or which could constitute a threat to human health or the environment, the permittee shall comply with the following reporting requirements:

i. The permittee shall, within two hours after the commencement of the discharge or of the permittee becoming aware of the discharge, verbally communicate the following information to the Department via the DEP Hotline at (609) 292-7172:

(A). A description of the discharge, including the time of the discharge, the location of the discharge (provide the designated discharge point name and three-digit

serial number), the estimated volume of the discharge, a description of the nature of the discharge as (1) "a dry weather overflow of wastewater from a combined sewer system which is (or "maybe") contaminated with (insert the identity of the suspected contaminant/pollutant, or describe the source of the additional and unusual contamination/pollutant), and the name of the receiving waterbody;

(B). Steps the permittee will take to determine the cause of the permit noncompliance; and

(C). Steps the permittee will take to reduce and eliminate the non complying discharge.

ii. The permittee shall, within 24 hours after the commencement of the discharge or of the permittee becoming aware of the discharge, verbally communicate the following information to the Department via the DEP Hotline (609) 292 7172:

(A). The duration of the discharge, including the exact dates and times, and if the noncompliance has not been corrected, the anticipated time when the permittee will return the discharge to compliance;

(B). The cause of the noncompliance;

(C). Steps the permittee is taking to reduce, eliminate, and prevent reoccurrence of the non complying discharge;

(D). An estimate of the threat to human health or the environment posed by the discharge;

(E). The measures the permittee has taken or is taking to remediate the problem and any damage or injury to human health or the environment and to avoid a repetition of the problem; and

(F). Any revisions to the information required by d.i above.

e. The permittee shall, within five (5) business days, Saturdays, Sundays, and state and federal holidays excepted, after the commencement of the discharge or of the permittee becoming aware of the discharge, submit in writing to the person identified in f, below all of the information required in d.i. and d.ii., above, if the permittee had not previously submitted the information in writing to the Department. The Department must receive the information required by the proceeding paragraph within the five (5) day period in order for the permittee to meet this requirement. If the Permittee becomes aware that it has failed to submit any relevant facts or submitted incorrect information required in d.i. and d.ii., above, the permittee shall immediately submit such facts or information to the Department.

f. The permittee shall submit the written notice required pursuant to c and d above to:

Assistant Director
Water & Hazardous Waste Enforcement Element
New Jersey Department of Environmental Protection
PO Box CN-029
Trenton, New Jersey
O8625-029

C. *Intrusion of Surface Waters*

1. Applicability: This section is applicable to all permittees of Combined Sewer Overflow Control Facilities.

2. The permittee shall prevent the intrusion of the receiving waters into the combined sewer collection and conveyance system past the combined sewer overflow control facilities. Such protection shall be provided against the intrusion of all receiving waters below the flood elevation. For the purposes of this section the flood elevation shall be one-foot above the 100 year fluvial flood elevation or the 100 year tidal elevation, which ever is greater (See N.J.A.C. 7:13).

D. *Solids/Floatables*

1. Interim Solids/Floatables Control Measures

a. Applicability: This section is applicable to all permittees of Combined Sewer Overflow Points.

b. On or before March 1, 1996, the permittee shall submit to the Bureau of Water Quality Analysis (BWQA), within the Division of Water Quality, a Interim Solids/Floatables Control Measures Plan for each CSO Point. The permittee, when developing and evaluating control measures to meet this requirement, shall, at a minimum, evaluate the implementation of each of the Screening and Skimming Control Measures listed in D.1.e.i & ii, below, for each CSO Point. If the permittee demonstrates, to the satisfaction of the Department, that there are no feasible Interim Solids/Floatables Control Measures that can be economically justified for a specific CSO Point, the permittee shall immediately initiate the development and implementation Long-term Solids/Floatables Control Measure(s) required in D.2., below, for that CSO Point.

c. Within sixty (60) days of the permittee's receipt of the Department's written comments on the plan, the permittee shall submit revised plans that include the modifications required in the Department's comments.

d. Within twelve (12) months of the permittee's receipt of the Department's written approval of the permittee's Interim Solids/Floatables Control Measures Plan, the permittee shall implement the approved Interim Solids/Floatables Control Measures, unless paragraph III.D.1.j. applies.

e. The conceptual plan shall fully document the evaluation of the Interim Solids/Floatables Control Measures in accordance with D.1.g., below. Control Measures which, as a minimum, must be evaluated include the following:

i. Screening Technologies - Screening Technologies involve the screening of Solids/Floatables materials from combined sewer overflows. Control measures under this category include, but are not limited to, baffles, trash racks, static screens, end of pipe netting, and mechanical screens. Implementation of a screening technology that complies with the same performance criteria specified under item D.2.b. below shall be given priority for consideration. If it is determined that the use of the 0.5 inch bar screen is not feasible, the permittee shall evaluate alternative grid or bar screen sizes.

ii. Skimming Technologies - Skimming Technologies skim Solids/Floatables materials from the receiving water body surface. Alternatives within this category include, but are not limited to, the placement of booms around an outfall or groups of outfalls, skimming open water areas with "skimming boats", and flow balance method (FBI) containment. Skimming control measures must be designed to prevent the transport of Solids/Floatables materials in the receiving water.

f. All Solids/Floatables materials removed from the combined sewer overflow which are not conveyed to the DTW must be disposed of properly at a permitted solid waste facility authorized to accept grit and screening materials from wastewater treatment facilities.

g. The methodology used in developing, evaluating, selecting, and implementing each Interim Solids/Floatables Control Measure and the reasons why a particular control measure was determined to be inappropriate to utilize for a CSO Point shall be documented. The documentation shall be submitted with the conceptual plan required in D.1.b., above, and incorporated into the CSOPPP. The documentation of the evaluation process to be submitted with the conceptual plan, required in D.1.b. above, shall include:

i. A list and description of alternatives that were considered;

ii. A list and description of the alternatives selected as the final plan for Interim Solids/Floatables Control Measures;

iii. A summary of the alternatives considered, but rejected, and the basis for rejecting them;

iv. The construction/implementation cost estimates, operation, and maintenance costs; and

v. An estimate of the anticipated decrease in Solids/Floatables for each control measure at each CSO Point.

h. The approved Interim Solids/Floatables Control Measure(s) shall be implemented, operated, and/or maintained until the Long-term Solids/Floatables Control Measures, required under item D.2.b., below, are in operation, unless otherwise directed by the Department.

i. Unless paragraph III.D.1.j. applies, within twelve (12) months after the permittee's receipt of the Department's approval of the Interim Solids/Floatables Control Measures Plan, the permittee shall submit to the Bureau of Permits Management, within the Division of Water Quality, a properly executed Interim Solids/Floatables Control Measures Implementation Certification, provided in Attachment F, accompanied by Form B, indicating the permittee's status with complying with the Interim Solids/Floatables Control Measures required in Part III.D.1. The Certification provided in Attachment F shall be properly executed, notarized, and submitted with a completed FORM B, "INTERIM SOLIDS/FLOATABLES CONTROL MEASURE IMPLEMENTATION CERTIFICATION SCHEDULE", listing all CSO Points owned and/or operated by the permittee, describing the type of Interim Solids/Floatables Control Measure implemented for each CSO Point, and indicating the date each control measure was placed into service.

j. The Department's approval of the permittee's Interim Solids/Floatables Control Measures Plan shall state whether a Treatment Works Approval (TWA)

application is necessary. If, pursuant to N.J.A.C. 7:14A-22.1 et seq., the implementation of the permittee's Interim Solids/Floatables Control Measures Plan requires a TWA application, then unless otherwise directed by the Department, the permittee shall comply with the following schedule:

i. Within sixty (60) days of the permittee's receipt of the Department's written conceptual approval of the permittee's Interim/Solid Floatables Control Measures Plan, the permittee shall submit an administratively complete Stage II/III TWA application (see N.J.A.C. 7: 14A-22.8 and 7:14A-22.10) to the Bureau of Construction and Connection Permits (BC&CP), within the Division of Water Quality.

ii. Within twelve (12) months of the permittee's receipt of the Department's Stage II/III TWA, unless otherwise directed by the Department, the permittee shall complete construction and commence operation of the control measures in the approved Interim Solids/Floatables Control Measures Plan.

2. Long-term Solids/Floatables Control Measures

a. Applicability: This section is applicable to all permittees of Combined Sewer Overflow Points.

b. In accordance with the schedule provided in D.2.e., below, the permittee shall implement control measures which will capture and remove Solids/Floatables which cannot pass through a bar screen having a bar spacing of a 0.5 inches (13.0 mm) from all CSOs, unless the permittee can demonstrate, to the satisfaction of the Department, in accordance with D.2.c., below, that an alternative control measure is more appropriate for a CSO Point.

c. The permittee may petition the Department for use of an alternative control measure by demonstrating, to the satisfaction of the Department, the appropriateness of the permittee's proposed alternative control measure as follows:

i. The permittee shall submit, to the Department, a cost/performance analysis. This cost/performance analysis shall: (1) evaluate the cost of implementing control measures to meet the requirements of III.D.2.b.; (2) evaluate the cost of implementing the permittee's proposed alternative control measure(s) and the resultant Solids/Floatables reduction; and (3) demonstrate that the cost of implementing control measures to meet the requirements of III.D.2.b. increases disproportionately and only provides a marginal increase in Solids/Floatables reduction over that of the proposed alternative control measure(s); and

ii. The permittee shall also perform and submit a separate analysis which demonstrates that the permittee's alternative control measure is designed to capture and remove objectionable Solids/Floatables, such as medical wastes including tampons applicators, syringes, condoms, vials, etc. from each CSO Point.

d. All Solids/Floatables materials removed from the CSO which are not conveyed to the DTW must be disposed of properly at a permitted solid waste facility authorized to accept grit and screening materials from wastewater treatment facilities. The reduction of the size of Solids/Floatables materials in the CSO prior to the discharge to the waters of the State to achieve compliance with this permit is not permitted.

e. The permittee shall plan, design, construct, operate and/or implement Long-term Solids/Floatables Control Measures in accordance with the following schedule:

i. **Submit an approvable a Long-term Solids/Floatables Control Measures Plan to the Department, on or before March 1, 1996;**

ii. **The permittee shall within sixty (60) days of the pemittee's receipt of the Department's written comments on the permittee's Long-term Solids/Floatables Control Measures Plan modify that submission pursuant the Department's written comments and resubmit it for the Department's approval;**

iii. **Within twelve (12) months of the permittee's receipt of the Department's written conceptual approval of its Long-term Solids/Floatables Control Plan, the permittee, unless otherwise directed by the Department, shall submit an administratively complete Stage II/III TWA application in accordance with N.J.A.C. 7:14A-22.8 and 7:14A-22.10 to the BC&CP.;**

iv. Within fifteen (15) months of the permittee's receipt of the Department's Stage II/III TWA, the permittee shall complete construction and commence operation of the approved Long-term Solids/Floatables Control Measures, unless otherwise directed by the Department.

f. The conceptual plan required in D.2.e.i. shall, as a minimum, contain a site plan, showing all existing and proposed facilities, a project schedule for design, and construction/implementation, and a description and schedule for obtaining all federal, state, regional and/or local agency approvals. The selected plan will describe all institutional arrangements which are necessary to implement the selected plan, as well as, identify the owner and operator of all proposed facilities.

g. All studies associated with the planning, design, and construction/implementation, including the implementation schedule of the Long-term Solids/Floatables Control Measures, shall be incorporated into the CSOPPP.

h. The permittee shall submit the conceptual plans and supporting documentation required pursuant to III.D.1.b, c & g and III.D.2.e.i & ii, and, if applicable, any petition for an alternative control measure as allowed under III.D.2.c, above, to:

Chief
Bureau of Water Quality Analysis
Division of Water Quality
New Jersey Department of Environmental Protection
PO Box CN 029
Trenton, New Jersey
08625-0029

i. The permittee shall submit applications for Treatment Works Approvals required in III.D.1.j.i. and III.D.2.e.iii, above, to:

Chief
Bureau of Construction and Connection Permits
Division of Water Quality
New Jersey Department of Environmental Protection
PO Box CN 029
Trenton, New Jersey
08625-029

E. ***Proper Operation and Maintenance Programs***

1. Applicability: This section is applicable to all permittees.

2. **On or before March 1, 1996, the permittee shall develop, maintain as current, and implement a proper operation and maintenance program** that will meet the requirements of the permit and will maintain in good working order and will operate as effectively as possible all treatment works, facilities, and systems of treatment and control for collection and treatment that are installed or used by the permittee for water pollution control and abatement to achieve compliance with the terms and conditions of the permit (See N.J.A.C. 7:14A-2.5(a)7).

3. The permittee shall develop O&M Plan and Manual(s), that support the implementation of the proper operation and maintenance program, as required in this subpart, in accordance with the schedule contained in item 2, above, and that demonstrates that the permittee has made or shall make the necessary financial, administrative, and institutional arrangements to meet the requirements of the permit. An O&M Plan and Manual(s) shall contain the following elements structured to address the type of facility regulated by the general permit authorization, including, but not limited to: an Annual Budget Analysis; a Financial Management System; Staffing and Training; an Emergency Operations Program, including a System Vulnerability Analysis and Emergency Operations Program; Administrative Functions; and Operation and Maintenance Manual(s).

4. The Proper Operation and Maintenance Plan and Manual(s) shall be incorporated into the CSOPPP.

F. ***Maximization of the Conveyance of Wastewater to the DTW for Treatment***

1. Applicability: This section is applicable to all permittees.

2. The permittee shall operate and maintain the facilities to maximize the conveyance of wastewater to the DTW for treatment and to minimize the frequency and duration of CSOs to the receiving waters.

3. **On or before March 1, 1996, the permittee shall develop a Facilities Inventory and Assessment Analysis (FIAA) and incorporate the FIAA into the**

CSOPPP. The FIAA must contain an inventory and engineering assessment of all facilities owned and/or operated by the permittee and authorized under the permit. The FIAA must, at a minimum, contain the following:

a. A sewer service area map delineating existing facilities. This map shall:

i. Delineate the service area of each catchment area of the collection and conveyance system;

ii. Show the collection and conveyance system detailing the size, types, and shapes of all pipes and appurtenances;

iii. Indicate the identity and location of each existing pumping station;

iv. Show the location, size, type, and shape of all interceptor sewers and trunk sewers;

v. Show the location and identity of each regulator and CSO Point;

vi. Show all point source discharges to receiving waters associated with the combined sewer system; and

vii. Delineate all areas served by separate stormwater sewer systems or separate sanitary sewer systems, and the location of where, if at all, these systems connect into and contribute wastewater to the combined sewer system.

b. An inventory and engineering assessment of the operational status and mechanical and structural integrity of the major components of the combined sewer system. This assessment shall be both a narrative and graphical descriptions addressing size, shape, hydraulic capacity, including, but not limited to, the combined sewer overflow control facilities, pumping stations, interceptors, and force mains, etc. The hydraulic performance capability of each component shall be determined.

4. The permittee shall incorporate the FIAA into the CSOPPP and shall maintain the FIAA as current and applicable for the life of the permit.

Part IV. MONITORING AND REPORTING REQUIREMENTS

A. Monitoring Requirements

1. Annual Inspections

a. Applicability: This section is applicable to all permittees of Combined Sewer Overflow Control Facilities.

b. The permittee shall conduct an annual inspection of all combined sewer overflow control facilities owned and/or operated by the permittee. The permittee shall inspect and prepare an engineering assessment of the mechanical and structural integrity and operability of each portion of the combined sewer overflow control facilities including the identification of any recommended rehabilitation measures or correction actions necessary to bring the facilities into compliance with the provisions of Part III.F. "Maximization of flow to DTW for Treatment". The permittee shall document the evaluation process, the findings of the inspections, the conclusions, and recommendations of the engineering assessment and incorporate this documentation into the CSOPPP.

B. Reporting Requirements

1. Annual Certifications and Reports of Noncompliance

a. Applicability: This section is applicable to all permittees.

b. The permittee shall submit an Annual Permit Compliance Certification (See Attachment C to this permit for the form of these certifications) that the facility is in compliance with the terms of this permit and the Combined Sewer Overflow Pollution Prevention Plan (CSOPPP), as specified in PART V.A., except, that if there are any incidents of noncompliance, those incidents shall be identified in a separate report of noncompliance transmitted with the annual certifications. The annual certifications, and, if applicable, the reports of noncompliance, shall be submitted in accordance with the procedure specified in e, below.

c. If there are any incidents of noncompliance with this permit and/or the CSOPPP, the permittee shall, in a separate report of noncompliance, identify the incident(s) of noncompliance and the steps being taken to remedy the noncompliance and to prevent such incidents from recurring (See N.J.A.C. 7:14A-2.4(a)12).

d. The certifications and reports of noncompliance, if applicable, shall be signed by the permittee and submitted to the Department with the executed ANNUAL PERMIT COMPLIANCE CERTIFICATION (Attachment C), in accordance with e, below. A copy of the annual certification and report of noncompliance shall be incorporated into the CSOPPP and maintained for a period of five (5) years after the submission. This period may be extended by the Department (See N.J.A.C. 7:14A-2.5(a)12. iii).

e. The permittee must annually re-submit an "Annual Permit Compliance Certification" (See Attachment C) (with new signatures each year), accompanied by the annual report of noncompliance, if applicable. These annual re-certifications shall be submitted in the same calendar month as the Individual Authorization was issued. These re-certifications shall be submitted to the Department annually, at the address specified on the certification form provided by the Department, and shall be submitted with the appropriate fee required under N.J.A.C. 7:14A-1.8(h).

2. Incidents of Noncompliance

a. Applicability: This section is applicable to all permittees.

b. Any noncompliance with this permit constitutes a violation of the New Jersey Water Pollution Control Act or other authority of N.J.A.C. 7:14A et seq., and is grounds for enforcement action, for permit termination, revocation and re-issuance or modification, or for denial of a permit renewal application (See N.J.A.C. 7:14A-2.5(a)1).

c. All instances of noncompliance, whether or not they have been previously reported, shall be reported to the Department in the annual report on noncompliance referenced in IV.B.1.c, above.

d. Instances of noncompliance include, but are not limited to, the failure to comply with any deadline specified in the permit, the discharge of dry weather overflows, the failure to develop and implement proper operation and maintenance programs, the failure to develop and/or comply with a compliance schedule contained within the

CSOPPP, the failure to perform the annual inspection, and the presence of other discharges.

3. Extended Combined Sewer Overflows

a. Applicability: This section is applicable to permittees of Combined Sewer Overflow Control Facilities and Combined Sewer Overflow Points.

b. The permittee shall report all Combined Sewer Overflows which continue to discharge when no precipitation has occurred for at least 24 hours prior to the observation of the discharge event.

c. The permittee shall report each Extended Combined Sewer Overflow using the reporting procedure for Dry Weather Overflows provided in Part III. Discharge Limitations, Subpart B. Dry Weather Overflows which, in the permittee's judgment, is appropriate for the nature of the discharge event.

C. Other Discharges

1. Applicability: This section is applicable to all permittees.

2. If, after the effective date of the General Permit Authorization, it is discovered that the permittee owns and/or operates CSO Points not included in the initial Request for Authorization, the permittee shall within thirty (30) days submit an RFA for those discharges in accordance with PART II of this permit.

3. If, the permittee discovers that it owns and/or operates discharges other than a CSO or separate stormwater, the permittee shall immediately discontinue the operation of such discharges and/or immediately apply for the appropriate New Jersey Pollutant Discharge Elimination System Discharge to Surface Water Permit in accordance with the NJPDES (See N.J.A.C. 7:14A-1 et seq.). The Department hereby reserves the right to take any enforcement action for unauthorized or unpermitted discharges.

PART V. SPECIAL CONDITIONS

A. *Preparation and Implementation of the Combined Sewer Overflow Pollution Prevention Plan*

1. Applicability: This section is applicable to all permittees.

2. General Requirements

The permittee shall develop, implement, and maintain a Combined Sewer Overflow Pollution Prevention Plan (CSOPPP) which meets the minimum content requirements of a CSOPPP, as specified in 4 below. The CSOPPP shall be developed and implemented in accordance with the schedule specified in 3 below.

3. Deadlines and Certifications

a. On or before March 1, 1996, the permittee shall establish and implement a CSOPPP for the portions of the combined sewer system owned and/or operated by the permittee and subject to the requirements of this permit, and shall submit to the Department a properly executed "Combined Sewer Overflow Pollution Prevention Plan Preparation Certification" (See Attachment B).

4. The CSOPPP shall, as minimum, contain the following:

a. Documentation of the procedures used to develop, evaluate and implement Interim Solids/Floatables Control Measures required in Part III.D.1, including the documentation required in Part III.D.1.g.;

b. Documentation of the procedures used to develop and implement the Long-Term Solids/Floatables Control Measures required in Part III.D.2, including the selected plan and corresponding implementation schedule;

c. Documentation of the evaluation process, the findings of the inspections, the conclusions, and recommendations of the Annual Inspection and associated engineering assessments required in Part IV.A.1;

d. A record of all incidents of noncompliance and copies of all reports associated with each incident of noncompliance required under Part IV.B.;

e. The Facilities Inventory and Assessment required in Part III.F. 3;

f. The Proper Operation and Maintenance Plan and Manual(s) required in Part III.E.3;

g. A copy of all state and federal permits issued for the construction and operation of existing and proposed combined sewer system facilities, copies of each administrative order, administrative consent order, notice of violation, complaint filed, or other corrective or enforcement action(s) required by any governmental agencies with regard to the operation of the facilities by the applicant within the previous five (5) years;

h. A copy of the completed reports/studies of the Combined Sewer Overflow Discharge Characterization Study required in Part V.B.; and

i. Copies of all correspondence between the Department and the permittee concerning the general permit including the RFA.

5. Additional Requirements

a. Agency Review

i. The permittee shall make the CSOPPP available upon request to an authorized representative of the Department.

ii. Upon review by an authorized representative, the Department may notify the permittee at any time that the CSOPPP does not meet one or more of the minimum requirements of this Subpart. Within the time period specified by the Department, the Permittee shall amend the CSOPPP to adequately address all deficiencies and shall submit to the Department a written certification that such amendments have been incorporated.

b. Amendments to the CSOPPP.

CSOPPPs may be amended so long as they continue to meet the requirements of Part V.A. of this permit. Any amended CSOPPPs shall be signed, certified, implemented, retained, and otherwise treated in the same manner as the original CSOPPP.

c. Public Review

All CSOPPPs prepared under this permit are considered reports that shall be available to the public for inspection and duplication under N.J.S.A. 58:10A-9.c. The permittee shall make the CSOPPPs available to interested parties upon request.

B. ***Preparation and Submission of the Combined Sewer Overflow Discharge Characterization Study***

1. Applicability: This section is applicable to all permittees of Combined Sewer Overflow Points.

2. General Requirements: Permittees are required to develop and submit a Combined Sewer Overflow Discharge Characterization Study (The Study) consisting of a field calibrated and verified Combined Sewer Overflow Model designed to represent the combined sewer system's response to historical events of precipitation. The model shall be developed to demonstrate the relationship between rainfall, surface runoff (stormwater), sanitary sewage, the combined sewer system's characteristics, and combined sewer overflows with respect to quantity and quality. To comply with this requirement the permittee shall use the U.S. EPA approved Storm Water Management Model (SWMM). The permittee may petition the Department for the use of an equivalent model. The Department shall have the final determination of the acceptability of the proposed substitute model.

3. Although The Study is considered one comprehensive analysis, the preparation and submission of The Study has been divided into six (6) specific individual components. The Permittee shall prepare and submit each of the components of The Study in accordance with the schedule set forth in Table I. The permittee shall obtain approval from the Bureau of Water Quality Analysis prior to proceeding with the development of each subsequent component of the Study. The Permittee shall submit each of the specified components to:

Division of Water Quality
Bureau of Water Quality Analysis
PO Box CN-029
Trenton, New Jersey
08625-0029

Each submission shall be transmitted to the Department by the permittee with a signed certification as provided in Attachment D, TRANSMITTED DOCUMENT CERTIFICATION.

4. The Permittee shall develop and submit The Study consisting of the individual components as described below.

a. Monitoring Program Proposal and Work Plan

The Monitoring Proposal and Work Plan shall conform with the requirements of "GUIDANCE FOR PREPARATION OF COMBINED WORK/QUALITY ASSURANCE PROJECT PLANS FOR ENVIRONMENTAL MONITORING", dated May, 1984, (OWRS QA - 1) prepared by the Office of Water Regulations and Standards, U.S. Environmental Protection Agency Washington, D.C. 20460. At a minimum the report shall address all of the components, a through f, of The Study.

b. Service Area Drainage and Land Use Report. The permittee shall provide the information used to construct the model and will contain, as a minimum, the information set forth in Table II. All methods of estimation used to produce the data will be presented in graphical, tabularized, and narrative formats as appropriate.

c. Sewer System Inventory and Assessment Report. The Permittee shall develop and submit a report that provides both narrative and graphical descriptions of the sewer systems which contribute flow to the Permittee's CSO Point. The report shall provide a comprehensive inventory of all elements of the combined sewer system including, but not limited to, all sewer lines, regulators, tide gates, diversion chambers, pumping stations interceptors, trunk sewers, and outfall structures. The report shall include operational status, condition, and hydraulic capacity of all facilities. Detailed drawings of all regulators, tide gates, and flow diversion structures in both plan and profile view are to be provided at a minimum. All information shall be qualified by field verifications.

d. Rainfall Monitoring Study. The Permittee shall perform a Rainfall Monitoring Study that shall include a historic precipitation analysis which, at a minimum, includes the evaluation of climatological records, and the determination of historic and measured rainfall event statistics. The permittee shall establish a rain gage network appropriate for the size of the study area and the model (SWMM) and continuously measure and record rainfall throughout the monitoring period. Precipitation data shall be correlated to other monitoring data in real-time.

e. Combined Sewer Overflow Monitoring Study. The Permittee shall perform monitoring work which will consist of collecting and analyzing representative samples of the actual CSOs during selected wet weather events in conformance with the schedule and requirements contained within the General Permit and the Department approved Monitoring Proposal and Work Plan. The monitoring requirements are provided in TABLE III. The permittee shall monitor a sufficient number of significant storm events to adequately calibrate and verify the model, at least two (2) significant wet weather events shall be evaluated. The frequency of sampling during the events shall not exceed one sample every fifteen (15) minutes, unless an alternative sampling protocol is approved by the Department.

f. Combined Sewer System Modeling Study. The Permittee shall develop a SWMM model, or other model approved by the Department, of the Permittee's combined sewer system and CSO Points in conformance with the schedule and requirements contained in this permit and the Department approved Monitoring Proposal and Work Plan.

5. The submission of all of The Study's components shall be accompanied by a properly executed certification provided in Attachment D.

C. *Other Permits or Regulatory Requirements*

Compliance with the conditions of this permit does not exempt the permittee from any other applicable permit or other regulatory requirements including, but not limited to, all other state, federal, local government, or Interstate Agency rules.

D. Penalties for Violations

1. Section 10 of the New Jersey Water Pollution Control Act provides that any person who violates a permit condition is subject to a civil penalty each day of violation. Any person who willfully or negligently violates permit conditions is subject to a fine each day of violation, or to imprisonment, or both.

2. Section 10 of the New Jersey Water Pollution Control Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine per violation, or by imprisonment, or by both.

3. Section 10 of the New Jersey Water Pollution Control Act provides that any person who knowingly makes a false statement, representation, or certification in any application, record, or other document filed or required to be maintained under the New Jersey Water Pollution Control Act shall, upon conviction, be subject to a fine, or imprisonment, or both.

4. Violation of any condition of this permit or the NJPDES regulations may be subject the permittee to an Assessment of Civil Administrative Penalties of up to $50,000.00 per violation per day in accordance with N.J.S.A. 58:10A-1 et seq.

GENERAL PERMIT NO. NJ0105023
TABLE I
COMBINED SEWER OVERFLOW DISCHARGE CHARACTERIZATION STUDY
SCHEDULE OF ACTIVITIES

STUDY COMPONENT	*DEADLINE FOR SUBMISSION*
Monitoring Program Proposal and Work Plan	March 1, 1996
Service Area Drainage and Land Use Report	March 1, 1996
Sewer System Inventory and Assessment Report	March 1, 1996
Rainfall Monitoring Study	Within 12 months of the permittee's receipt of the Department's written authorization to proceed.
Combined Sewer Overflow Monitoring Study	Within 12 months of the permittee's receipt of the Department's written authorization to proceed.
Combined Sewer System Modeling Study	Within 12 months of the permittee's receipt of the Department's written authorization to proceed.

GENERAL PERMIT NO. NJ0105023
TABLE II
COMBINED SEWER OVERFLOW DISCHARGE CHARACTERIZATION STUDY
INFORMATION TO BE INCLUDED IN THE SERVICE AREA DRAINAGE AND LAND USE REPORT

Drainage Area Data	*Items of concern*
Subcatchment:	Area, ground slope, overland flow width, subcatchment length, percent impervious cover.
Channel/pipe:	Length, slope, shape, pipe configuration which shows connection & flow direction. Connections of significant non-residential users, separately sanitary sewered service area and separate storm water sewer system connections tributary to the combined sewer should be specifically noted.
Map Scale:	1:2400
Service Area Map:	Land use distribution (commercial/industrial, residential, park land, etc. ,areas served by separate sanitary and storm sewers, or those which just contribute storm water, etc.)
Pollutant Build-up:	Load factor for each land use and pollutant.
Sewer Line data:	
General:	Service area population data.
Sewer pipe:	Size, slope, shape, and pipe configuration which shows connections including service area delineation. Location of metering stations, if applicable.
Dry weather flow:	Average dry weather flow, and average concentration of each pollutant.
DTW:	Capacity, location, average removal rate of each pollutant.
Pumping stations:	Location capacity of dry well, pumps, etc.
CSO Point:	Location, type and size or control, and relationship to sewer system (interceptor, outfall structure etc.)

GENERAL PERMIT NO. NJ0105023
TABLE III
COMBINED SEWER OVERFLOW DISCHARGE CHARACTERIZATION STUDY
COMBINED SEWER OVERFLOW MONITORING STUDY
MINIMUM MONITORING REQUIREMENTS

PARAMETER	*SAMPLE TYPE*
Chemical Oxygen Demand	Grab
Five Day Biochemical Oxygen Demand	Grab
Fecal Coliform	Grab
Suspended Solids	Grab
Settleable Solids	Grab
Total Dissolved Solids	Grab
Nitrogen Series: ammonia, nitrites, nitrates, Total Kjeldahl Nitrogen.	Grab
Phosphorous Series: Orthophosphate & Total Phosphorous	Grab
Temperature	Grab
Volumetric Flow Rate	Continuous Recording
pH	Grab
Hardness	Grab
Salinity	Grab
Toxic-Metals (To be specified by the Department)	Composite

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104(e) REQUEST FOR INFORMATION

1. Please produce the following documents:

   a. River Inspection Reports (reports may be organized by municipalities);
   b. Stream Contamination and Pollution Reports (reports may be organized by municipalities);
   c. PVSC Annual Reports;
   d. PVSC Monthly Reports;
   e. PVSC's Heavy Metal Source Determination Study;
   f. Seymour Lubetkin's notebook entitled "Passaic River Discharge Outlets - Below the Dundee Dam;"
   g. PVSC Department of Sanitation Control Laboratory Reports;
   h. PVSC Weekly Summaries of Inspections;
   i. PVSC Industrial Sampling Study Results;
   j. PVSC Report titled "Pollutions Corrected During 1969;" and
   k. PVSC Combined Sewer Overflow Report (Killam, 1976).

2. Please produce the files marked "Chief Engineer Lubetkin's Files." These documents are, unless recently moved, located in the basement of the Passaic Valley Sewerage Commissioners.

3. Please produce all documents reflecting the calculation, measurement or estimation of amounts bypassed or "thrownout" to the Passaic River. These documents should include, but not be limited to the following classes of documents titled:

   a. "Municipal Flows - Throw out Calculations"
   b. "Municipal Flows"
   c. "Summary of Measurement Year"

   An example of each of this type of documents is attached.

4. Please produce all reports or documents relating to bypassing or "throw out" from any combined sewer outfall.

5. Please produce all other documents, including but not limited to, calculations, computations, correspondence and memorandum relating to the frequency and volume of material bypassed, discharged, thrown out or diverted to the Passaic River.

6. Please produce all documents, including but not limited to, bills, invoices, correspondence, and memoranda relating to the City of Newark, the City of East Newark, and the Town of Harrison. Some documents relevant to this request are believed to be located in the Passaic Valley Sewerage Commissioners' basement and billing department.

7. Please produce all documents, including but not limited to, correspondence, waste effluent surveys, sewer connection applications, and memorandum regarding all past and present significant industrial users located in Newark, Kearny, East Newark and Harrison.

Some documents relevant to the request are believed to be located in the industrial division offices and in the basement of the Passaic Valley Sewerage Commissioners.

8. Please produce all documents relating to maintenance, repairs or other activities performed on any equipment or property owned, operated or maintained by the Passaic Valley Sewerage Commissioners, including but not limited to pipes, overflow regulators, and other facilities located in the following CSO Districts:

Verona Avenue (Newark)	Polk Street (Newark)	Marshall Street (Kearny)
Herbert Avenue (Newark)	Jackson Street (Newark)	Central Avenue (East Newark)
Clay Street (Newark)	City Dock (Newark)	Harrison Avenue (Harrison)
Delavan Avenue (Newark)	Bridge Street (Newark)	Bergen Street (Harrison)
Fourth Avenue (Newark)	Nairn Avenue (Kearny)	Middlesex Street (Harrison)
Passaic Street (Newark)	Ivy Street (Kearny)	Cleveland Avenue (Harrison)
Orange Street (Newark)	Bergen Avenue (Kearny)	New Street (Harrison)
Saybrook Place (Newark)	Johnston Avenue (Kearny)	Worthington Avenue (Harrison)
Newark	Tappan Street (Kearny)	Rector Place (Newark)
Freeman Street (Newark)	Dukes Street (Kearny)	Dey Street (Harrison)
Oriental Street (Newark)	Bergen Avenue (Kearny)	

9. Please produce all documents relating to the Passaic Valley Sewerage Commissioners' general permits for combined sewer outfall discharges to the Passaic River from 1975 to the present.

10. Please produce all "ad valorem" files or any other documents relating to nonsignificant industrial users of the Passaic Valley Sewerage Commissioners' facilities.

11. Please produce the following documents required by the PVSC's General Permit effective March 1995:

a. PVSC Request for Authorization (RFA) due to NJDEP by April 1, 1995
b Copy of written documentation submitted to the NJDEP associated with Dry Weather Overflows as described in section B of permit
c. The PVSC's Interim Solids/Floatable Control Measure Plan - due to NJDEP by March 1, 1996 as described in section D page 10 of permit
d. Treatment Works Approval Application, as described in section 10 page 11 of permit
e. PVSC's Operation and Maintenance Plan and Manuals - due to NJDEP by March 1, 1996
f. PVSC's Facilities Inventory and Assessment Analysis (FIAA) - due to the NJDEP by March 1, 1996
g. Each Annual Permit Compliance Certification and any reports of noncompliance
f. Copies of any Extended Combined Sewer Overflow reports
g. PVSC's Combined Sewer Overflow Pollution Prevention Plan (CSOPPP) - due to NJDEP by March 1, 1996
h. PVSC's Combined Sewer Overflow Discharge Characterization Study - six components - scheduled dates to NJDEP outlined in table I of permit
i. Results/reports associated with the implementation of the Combined Sewer Overflow Discharge Characterization Study
j. Any information related to the NJDEP's determination that an individual permit would be required

10/10/90

Municipal Flows - Throwout Calculations

The following procedure has been developed to equitably distribute the flows from all the municipalities in the PVSC district in the event of throwing out the line during periods of heavy rainfall. In the case of throwing out the line in Newark, a formula needs to be developed every year and is based on the previous years flows. While the main throwout is Newark, other line throwouts are Union outlet, Yantacaw (Includes every municipality above the Yantacaw pump station) and Paterson.

The procedure for determining the Newark throwout is as follows:

1. For 1990, determine the 1989 percentage of the total flow.

1989 total Newark flow - 33718.85 Million Gallons

Less 1989 Union outlet flow - 804.15 Million Gallons

Total - 32914.70 Million Gallons

1989 Plant flow - 88758.03 Million Gallons

Newark percentage - 32914.70/88758.03 = 0.370836 or 37.0836%

2. Develop throwout equation

Let N = Newark recorded flow in MGD for the week

Y = Newark bypass flow in MGD for the week

T = Total Plant flow in MGD excclusive of Jersey City and Bayonne + So. Kearny for the week

$0.370836(T + Y) = N + Y$

$0.370836T + 0.370836Y = N + Y$

$0.370836T - N = Y - 0.370836Y$

$0.370836T - N = 0.629164Y$

$0.370836T - N/0.629164 = Y$

$0.370836T/0.629164 - N/0.629164 = Y$

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0.58941T - 1.58941N = Y

0.58941(T - N) - N = Y

3. Check the throwout (bypassing) report to determine if any bypassing was done during the week.

4. Solve for Y in the equation Y= 0.58941(T - N) - N

If Y calculates to be Zero or a negative number, no adjustment is made.

5. Calculate the adjusted Newark flow

Newark flow = N + Y

6. Calculate the Adjusted Total Plant flow

Adjusted Total Plant flow = T + Y + Jersey City flow + Bayonne flow + So. Kearny Fl

7. Calculate the ratio of the Non Adjusted Total flow to the Adjusted Plant flow.

8. On Table Five, multiply the ratio by the flow from each municipality to obtain the adjusted flows. Excluded in this calculation are companies with direct connections into the PVSC interceptor (Marcal Paper, Garden State Paper, Fairlawn Industries, Recycled Paperboard), Hoffmann Laroche, Jersey City and Bayonne. + So. Kearny Fl The ratio must be applied to the Newark flow also which is N + Y.

In the case of throwing out the line upstream such as a Union Outlet, Yantacaw, Paterson or Hawthorne, the same procedures must be used.

MUNICIPAL FLOWS

MUNICIPAL FLOWS FOR WEEK #3	10/19/94	10/26/94
MUNICIPALITY	M.G.D.	Bypass Prorate	Adjusted M.G.D.
PATERSON	[redacted]	0.90362003	27.857
HALEDON	1.079	0.90362003	0.975
NORTH HALEDON	0.479	0.90362003	0.433
PROSPECT PARK	0.410	0.90362003	0.371
HAWTHORNE	1.812	0.90362003	1.637
TOTOWA	2.041	0.90362003	1.844
WEST PATERSON	1.247	0.90362003	1.127
GLEN ROCK	0.994	0.90362003	0.898
FAIRLAWN	3.478	0.90362003	3.143
FAIRLAWN INDUSTRIES	0.118	0.90362003	0.118
ELMWOOD PARK	2.056	0.90362003	1.858
MARCAL PAPER	4.638	0.90362003	4.638
HOFFMANN L.R.	1.976	0.90362003	1.976
CLIFTON	11.547	0.90362003	10.434
PASSAIC	15.141	0.90362003	13.681
GARDEN STATE PAPER	7.566	0.90362003	7.566
GARFIELD	3.167	0.90362003	2.862
SADDLE BROOK	1.399	0.90362003	1.264
LODI	3.442	0.90362003	3.110
WALLINGTON	1.634	0.90362003	1.477
EAST RUTHERFORD	0.745	0.90362003	0.673
RUTHERFORD	0.850	0.90362003	0.768
LYNDHURST	2.591	0.90362003	2.341
NUTLEY	4.502	0.90362003	4.069
BELLEVILLE	3.828	0.90362003	3.459
UNION OUTLET	20.880	0.90362003	18.868
LITTLE FALLS	1.126	0.90362003	1.018
NORTH ARLINGTON	1.638	0.90362003	1.480
KEARNY	6.172	0.90362003	5.578
EAST NEWARK	0.756	0.90362003	0.683
HARRISON	3.850	0.90362003	3.479
JERSEY CITY	47.509	0.90362003	47.509
BAYONNE	8.288	0.90362003	8.288
SOUTH KEARNY	1.685	0.90362003	1.685
NEWARK	62.538	0.90362003	74.845
Plant Q-(J.C., Bay., So.kny.)	204.528	82.828	
THROWOUT(M.G.D.)	[redacted]	Newark	
Industry+J.C.+Bay.+So.Kny	71.779		
Prorate FACTOR	0.90362003		
PLANT TOTAL	262.010	282.300	262.010

Summary Of Measurement Year 1995

WEEK	FIRST	SECOND	THIRD	FOURTH	SUM	1995	1994	Percentage
WEEK END DATE->	Quarter	Quarter	Quarter	Quarter	M.G.	Average	Average	Difference
MUNICIPALITY/DAYS	91.50	90.00	91.00	92.50	365.00	M.G.D.	M.G.D.	
PATERSON	2556.42	2493.37	2573.24	2470.65	10093.68	27.654	30.371	-8.95%
HALEDON	97.33	104.65	100.03	100.78	402.79	1.104	1.284	-14.06%
NORTH HALEDON	44.95	46.09	43.76	46.75	181.55	0.497	0.613	-18.86%
PROSPECT PARK	33.03	33.76	33.24	29.91	129.93	0.356	0.347	2.59%
HAWTHORNE	160.87	172.77	180.70	191.44	705.77	1.934	2.312	-16.37%
TOTOWA	173.32	189.66	171.46	181.54	715.97	1.962	2.204	-11.00%
WEST PATERSON	101.05	113.03	97.04	93.84	404.95	1.109	1.345	-17.51%
GLEN ROCK	91.87	93.67	89.33	89.58	364.46	0.999	1.147	-12.95%
FAIRLAWN	297.52	336.93	319.91	313.37	1267.73	3.473	3.367	3.15%
FAIRLAWN INDUSTRY	11.92	18.04	16.18	14.48	60.63	0.166	0.198	-16.11%
ELMWOOD PARK	189.39	195.91	180.93	174.93	741.15	2.031	2.360	-13.96%
MARCAL PAPER	380.00	362.51	358.73	387.63	1488.88	4.079	4.124	-1.09%
HOFFMANN L.R.	169.31	151.52	179.29	221.92	722.05	1.978	2.488	-20.49%
CLIFTON	1060.17	1101.02	1023.89	987.66	4172.74	11.432	13.694	-16.52%
PASSAIC	1189.98	1194.44	1112.28	1206.03	4702.73	12.884	14.483	-11.04%
GARDEN STATE PAP.	656.03	706.26	665.21	758.97	2786.47	7.634	6.715	13.69%
GARFIELD	316.66	316.86	297.34	344.90	1275.75	3.495	4.376	-20.13%
SADDLE BROOK	129.69	142.82	137.08	135.63	545.22	1.494	1.600	-6.64%
LODI	285.82	283.07	252.64	268.07	1089.60	2.985	3.219	-7.26%
WALLINGTON	140.24	150.84	145.34	143.02	579.43	1.587	1.651	-3.85%
EAST RUTHERFORD	61.91	63.72	68.24	69.77	263.64	0.722	0.809	-10.72%
RUTHERFORD	79.69	87.92	93.03	83.52	344.16	0.943	1.091	-13.58%
LYNDHURST	244.96	290.15	295.52	271.58	1102.20	3.020	3.140	-3.83%
NUTLEY	377.12	431.38	403.65	345.16	1557.30	4.267	4.788	-10.89%
BELLEVILLE	317.71	299.34	281.58	292.54	1191.17	3.263	4.031	-19.04%
UNION OUTLET	1877.93	1922.90	1750.59	1623.58	7174.99	19.658	24.355	-19.29%
LITTLE FALLS	116.57	147.45	111.52	98.49	474.02	1.299	1.660	-21.77%
NORTH ARLINGTON	148.15	159.37	144.88	148.15	600.54	1.645	2.005	-17.94%
KEARNY	558.95	569.59	495.49	494.55	2118.58	5.804	6.905	-15.94%
EAST NEWARK	45.42	46.99	47.71	50.44	190.56	0.522	0.536	-2.60%
HARRISON	316.90	244.32	249.27	302.59	1113.08	3.050	4.157	-26.64%
JERSEY CITY	4048.97	4083.91	4014.93	4184.83	16332.63	44.747	46.639	-4.06%
BAYONNE	751.57	819.34	731.33	712.10	3014.35	8.258	9.267	-10.88%
SOUTH KEARNY	149.88	156.76	149.87	156.15	612.661	1.679	1.882	-10.81%
NEWARK	6644.15	6897.55	6498.01	6703.56	26743.27	73.269	83.782	-12.55%
THROWOUT	130.29	68.87	69.95	191.69	460.80	1.262		
PLANT TOTAL	23825.44	24427.89	23313.24	23698.08	95264.643	260.999	292.95	-10.91%
PLANT TOTAL	23825.44	24427.89	23313.24	23698.08	95264.643	260.999	292.95	-10.91%
RAIN FALL	8.52	7.95	7.15	9.98	33.60			